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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/783,725	02/14/2001	Thomas R. Firman	10591-003008	6557

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225 FRANKLIN ST
BOSTON, MA 02110

EXAMINER

ARMSTRONG, ANGELA A.

ART UNIT	PAPER NUMBER
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2654

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/783,725

Applicant(s)

FIRMAN, THOMAS R.

Examiner

Angela A. Armstrong

Art Unit

2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-57 is/are pending in the application.
- 4a) Of the above claim(s) 4,5 and 16-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-15 and 41-57 is/are rejected.
- 7) ☒ Claim(s) 40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group II in Paper No. 8 is acknowledged.

Claim Objections

2. Claim 40 is objected to because of the following informalities: as written, the claim depends from a cancelled claim (claim 1). Applicant is requested to either cancel the claim or amend the claim to depend from a pending method claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 recites the limitation "to be converted to said signal" in line 4. The phrase lacks clear antecedent basis because the voiced utterance is already converted into a corresponding signal on lines 2-3.

Claim 14 recites the limitation "said command" in line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 14 is rejected under 35 U.S.C. 102(e) as being anticipated by Goldhor (US Patent No. 5,231,670).

5. Regarding claim 14, Goldhor teaches a voice user interface device comprising means for converting a voiced utterance into a corresponding signal as an input to a computer and means for converting a voiced utterance as either one to be converted to said signal or as one to be converted to said command (Figure 1, elements 12, 14, 16, 18, “recognizer”; col. 1, lines 17-20 55-68; col. 2, lines 1-2; col. 4, lines 10-13; col. 6, lines 46-48),

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 6-13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldhor (US Patent No. 5,231,670) in view of McKiel (US Patent No. 5,133,011).

Art Unit: 2654

7. Regarding claim 6, Goldhor teaches a voice user interface system for producing input to a computer, and a program for execution on said computer, a state of said program, said configuration being associated with control of said program, comprising a voice recognizer for recognizing a voiced utterance and for providing corresponding signals as input to said computer (Figure 1, elements 12, 14, 16, 18, "recognizer"; col. 1, lines 17-20 55-68; col. 2, lines 1-2; col. 4, lines 10-13; col. 6, lines 46-48), and a converter for converting said voiced utterance into a command string including a command directing motion of said pointer relative to said configuration (col. 1, lines 17-20 55-68; col. 2, lines 1-2; col. 4, lines 10-13; col. 6, lines 46-48).

Goldhor does not specifically teach mimicking mouse commands or various details related to the display of the graphical user interface. McKiel teaches a method and apparatus for linear vocal control of cursor positioning with a computer display system and provides a description of well known cursor functionality and graphical user interface display for permitting computer users to access computer applications and manage computer files by graphically designating graphic representations, or icons, and manipulating those icons via a graphic pointing device or cursor (col. 1, lines 29-39; col.2, line 38 to col. 3, line 18).

It would have been obvious to one of ordinary skill at the time of the invention to manipulate the movement of the cursor using vocal commands as taught by McKiel, in the system of Goldhor, because this would enable a person who is not physically able to move the cursor to be able to move the cursor or access and control icons/applications via vocal commands.

Art Unit: 2654

Regarding claim 7, Goldhor teaches command string further comprises a command to said program at (col. 1, lines 17-20 55-68; col. 2, lines 1-2; col. 4, lines 10-13; col. 6, lines 46-48).

Regarding claim 8, similar limitations to claim 6 are discussed above. Additionally, Goldhor teaches converting based on a state of the subsystem comprising said voice recognizer and said converter at col. 1, lines 55-60; col. 8, lines 24-27, as converting a voiced utterance to control an application.

Regarding claim 9, similar limitations to claim 6 are discussed above. Additionally, Goldhor teaches converting based on a state of said program at col. 1, lines 55-60; col. 8, lines 24-27, as converting a voiced utterance to control an application.

Regarding claim 10, Goldhor teaches converting voiced utterances to text at col. 1, lines 55-57.

Regarding claim 11, Goldhor teaches using keyboard as the alternative at col. 1, lines 67-68, col. 2, lines 1-2; col. 6, lines 46-48.

Regarding claim 12, Goldhor does not specifically teach an event queue. However, providing an event queue in a computer operating system was well known in the art so as monitor and maintain system processing for allowing for a multi-tasking system.

It would have been obvious to one of ordinary skill at the time of the invention to provide an event queue in the operating system as was well known in the art, in the system of Goldhor, for the purpose of providing for a reliable and efficient multi-tasking operating system.

Regarding claim 13, similar limitations to claim 6 are discussed above. Additionally, Goldhor teaches pointer movement continued unabated until stopped by an action of the user at

Art Unit: 2654

col. 1, lines 67-68, col. 2, lines 1-2 and col. 6, lines 46-48, since using the voice input as equivalent to keyboard or mouse input.

Regarding claim 15, similar limitations to claims 6-9 are discussed above. Additionally, Goldhor teaches mapping from a member of said set of internal representations to a member of said set of output strings used by said converter at col. 1, lines 27-34, col. 5, lines 3-5, 61-66; col.6, lines 18-26, as permitting multiple recognizer representations to be mapped to a single command.

8. Claims 35-39 and 41-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKiel (US Patent No. 5,133,011).

9. Regarding claim 35, McKiel discloses a method and apparatus for linear vocal control of cursor positioning with a computer display system and provides a description of well known cursor functionality and graphical user interface display for permitting computer users to access computer applications and manage computer files by graphically designating graphic representations, or icons, and manipulating those icons via a graphic pointing device or cursor (col. 1, lines 29-39; col.2, line 38 to col. 3, line 18), which reads on a method for use with a machine having a graphical user interface and an application program, the method comprising the graphical user interface enabling a user to launch the application program and receiving a voice utterance from a user.

McKiel does not specifically disclose launching the application program in response to the received voiced utterance. However, the teachings of McKiel describe the well known

Art Unit: 2654

implementation of a pointer for accessing computer applications and disclose using voice to control cursor functionality.

It would have been obvious to one of ordinary skill at the time of the invention to use the system of McKiel to launch application programs via voice control of the cursor so as to provide computer access to application programs for physically challenged individuals.

Regarding claim 36, McKiel teaches an operating system with a graphical interface at (col. 1, lines 29-39; col.2, line 38 to col. 3, line 18).

Regarding claim 37, McKiel teaches the graphical user interface is shown on a display at col. 2, lines 43-45.

Regarding claim 38, McKiel teaches the machine comprises a computer (col. 1, lines 29-39; col.2, line 38 to col. 3, line 18).

Regarding claim 39, similar limitations to claim 35 are discussed above. Additionally McKiel teaches there are multiple application programs (col. 1, lines 29-39; col.2, line 38 to col. 3, line 18).

Regarding claim 41, similar limitations to claim 35 are discussed above. Additionally, McKiel teaches manipulating one other graphical item (col. 1, lines 29-39; col.2, line 38 to col. 3, line 18), as various icons or graphical representations to which the user has access and control.

Regarding claim 42, McKiel teaches an operating system with a graphical interface at (col. 1, lines 29-39; col.2, line 38 to col. 3, line 18).

Regarding claim 43, McKiel teaches the graphical user interface is shown on a display at col. 2, lines 43-45.

Art Unit: 2654

Regarding claim 44, McKiel teaches the machine comprises a computer (col. 1, lines 29-39; col.2, line 38 to col. 3, line 18).

Regarding claim 45, similar limitations to claims 35 and 41 are discussed above. Additionally McKiel teaches there are multiple graphical items and manipulating the other graphical items (col. 1, lines 29-39; col.2, line 38 to col. 3, line 18), as various icons or graphical representations to which the user has access and control.

Regarding claims 46-51, McKiel does not specifically teach manipulating other graphical items includes altering size and location of a window (col. 1, lines 29-39; col.2, line 38 to col. 3, line 18). However, manipulating a window in a computer graphical user interface was well known in the art.

It would have been obvious to one of ordinary skill at the time of the invention to implement altering the size and location of a window in a computer graphical user interface, so as to provide conventional icon manipulation in a manner that was well known in the art, as suggested by McKiel (col. 1, lines 33-35).

Regarding claim 52, similar limitations to claims 35, 41 and/or 45 are discussed above. Additionally, McKiel teaches selectable menu items (col. 1, lines 29-39; col.2, line 38 to col. 3, line 18), as various icons or graphical representations to which the user has access and control.

Regarding claim 53, similar limitations to claim 35 are discussed above. Additionally McKiel teaches there are multiple graphical representations (col. 1, lines 29-39; col.2, line 38 to col. 3, line 18).

Regarding claim 54, McKiel teaches the graphical user interface is shown on a display at col. 2, lines 43-45.

Art Unit: 2654

Regarding claim 55, McKiel teaches the machine comprises a computer (col. 1, lines 29-39; col.2, line 38 to col. 3, line 18).

Regarding claim 56, McKiel does not specifically disclose performing a function associated with a menu item in response to a second received voiced utterance. However, the teachings of McKiel describe the well known implementation of a pointer for accessing computer applications and disclose using voice to control cursor functionality.

It would have been obvious to one of ordinary skill at the time of the invention to use the system of McKiel to provide application programs or other menu item functionality via voice control of the cursor so as to provide computer access to application programs for physically challenged individuals.

Regarding claims 57, McKiel does not specifically teach manipulating other graphical items includes altering the appearance of the included item (col. 1, lines 29-39; col.2, line 38 to col. 3, line 18). However, manipulating a window in a computer graphical user interface was well known in the art.

It would have been obvious to one of ordinary skill at the time of the invention to implement altering the size and location of graphical icon in a computer graphical user interface, so as to provide conventional icon manipulation in a manner that was well known in the art, as suggested by McKiel (col. 1, lines 33-35).

Art Unit: 2654

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela A. Armstrong whose telephone number is 703-308-6258.

The examiner can normally be reached on Monday-Thursday 7:30-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (703) 305-9645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Angela A. Armstrong
Examiner
Art Unit 2654

AAA
March 22, 2004

Angela Armstrong